

## **I. Amendments to the Claims**

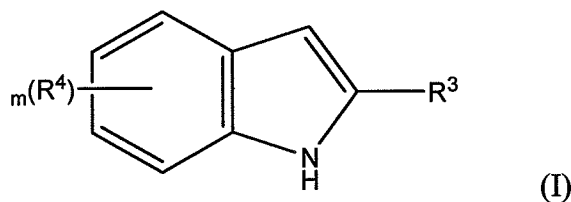
This listing of claims replaces without prejudice all prior versions and listings of claims in the application.

### **Listing of the Claims:**

1.-15. (Canceled).

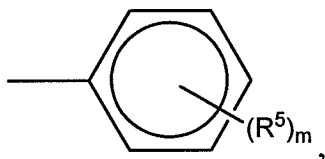
16. (New) A stabilizer system for stabilizing halogen-containing polymers against thermal degradation, the stabilizer system comprising:

- (a) at least one perfluoroalkanesulphonate salt; and
- (b) at least one indole wherein the indole has the general formula (I)



wherein m is 0, 1, 2 or 3;

R<sup>3</sup> is C<sub>1</sub>-C<sub>18</sub> alkyl, C<sub>2</sub>-C<sub>18</sub> alkenyl, phenyl,



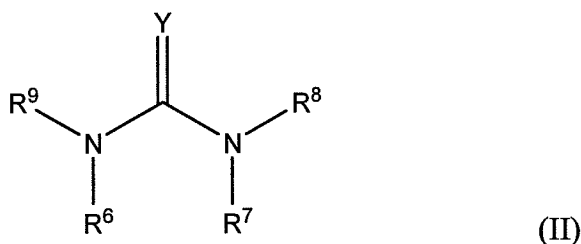
C<sub>7</sub>-C<sub>24</sub> alkylphenyl, C<sub>7</sub>-C<sub>10</sub> phenylalkyl or C<sub>1</sub>-C<sub>4</sub> alkoxy;

R<sup>4</sup> and R<sup>5</sup> are H, C<sub>1</sub>-C<sub>4</sub> alkyl, or C<sub>1</sub>-C<sub>4</sub> alkoxy.

17. (New) The stabilizer system of claim 16, wherein the perfluoroalkanesulfonate salt is a salt of a metal selected from the group consisting of Li, Na, K, Mg, Ca, Sr, Ba, Sn, Zn, Al, La and Ce.

18. (New) The stabilizer system of claim 17, wherein the perfluoroalkanesulfonate salt is sodium triflate or potassium triflate.

19. (New) The stabilizer system of claim 16, wherein R<sup>3</sup> is phenyl.
20. (New) The stabilizer system of claim 16, wherein the indole is selected from the group consisting of 2-phenylindole and 2-phenyllaurylindole.
21. (New) The stabilizer system of claim 16, wherein the indole is present in an amount of from about 0.01 to about 10 parts by weight, based on the weight of the halogen-containing polymer and the perfluoroalkanesulfonate salt is present in an amount of from about 0.001 to about 5 parts by weight, based on the weight of the halogen-containing polymer.
22. (New) The stabilizer system of claim 16, further comprising metal soaps, polyols, disaccharide alcohols, glycidyl compounds, hydrotalcites, alkali metal/alkaline earth metal aluminosilicates, alkali metal/alkaline earth metal hydroxides, alkaline earth metal oxides, alkaline earth metal (hydrogen) carbonates, alkali metal (alkaline earth metal) hydroxycarboxylates or carboxylates, phosphates, plasticizers, antioxidants, fillers, pigments, light stabilizers, lubricants, epoxidized fatty esters and mixtures thereof.
23. (New) A halogen-containing polymer comprising the stabilizer system of claim 16.
24. (New) A process for stabilizing a chlorine-containing polymer against thermal degradation, the process comprising adding the stabilizer system according to claim 16 to the chlorine-containing polymer.
25. (New) A stabilizer system for stabilizing halogen-containing polymers against thermal degradation, the stabilizer system comprising:
  - (a) at least one perfluoroalkanesulphonate salt; and
  - (b) at least one urea wherein the urea has the general formula (II)



wherein Y is S or NH

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup>, independently of one another, are H, C<sub>1</sub>-C<sub>18</sub> alkyl optionally substituted with hydroxyl groups and/or C<sub>1</sub>-C<sub>4</sub> alkoxy groups, C<sub>2</sub>-C<sub>18</sub> alkenyl, phenyl optionally substituted with up to 3 hydroxy and/or C<sub>1</sub>-C<sub>4</sub> alkyl/alkoxy groups, C<sub>7</sub>-C<sub>20</sub> alkylphenyl or C<sub>7</sub>-C<sub>10</sub> phenylalkyl; and 2-substituents selected from R<sup>6</sup> to R<sup>9</sup> may also form a ring, or a dimerized or trimerized urea thereof, and reaction products thereof.

26. (New) The stabilizer system of claim 25, wherein the perfluoroalkanesulfonate salt is a salt of a metal selected from the group consisting of Li, Na, K, Mg, Ca, Sr, Ba, Sn, Zn, Al, La and Ce.

27. (New) The stabilizer system of claim 26, wherein the perfluoroalkanesulfonate salt is sodium triflate or potassium triflate.

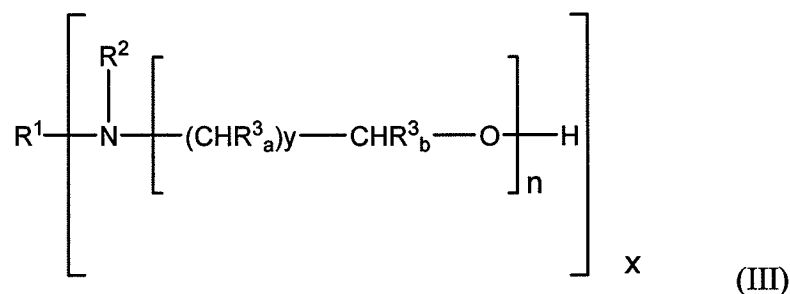
28. (New) The stabilizer system of claim 25, wherein R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> independently are phenyl or H.

29. (New) The stabilizer system of claim 25, wherein the urea is selected from the group consisting of N,N'-diphenylthiourea, N-phenylurea, trishydroxyethyl and trishydroxypropyl isocyanurate.

30. (New) The stabilizer system of claim 25, wherein the urea is present in an amount of from about 0.01 to about 10 parts by weight, based on the weight of the halogen-containing polymer and the perfluoroalkanesulfonate salt is present in an amount of from about 0.001 to about 5 parts by weight, based on the weight of the halogen-containing polymer.

31. (New) The stabilizer system of claim 25, further comprising metal soaps, polyols, disaccharide alcohols, glycidyl compounds, hydrotalcites, alkali metal/alkaline earth metal aluminosilicates, alkali metal/alkaline earth metal hydroxides, alkaline earth metal oxides, alkaline earth metal (hydrogen) carbonates, alkali metal (alkaline earth metal) hydroxycarboxylates or carboxylates, phosphates, plasticizers, antioxidants, fillers, pigments, light stabilizers, lubricants, epoxidized fatty esters and mixtures thereof.

32. (New) A halogen-containing polymer comprising the stabilizer system of claim 25.
33. (New) A process for stabilizing a chlorine-containing polymer against thermal degradation, the process comprising adding the stabilizer system according to claim 25 to the chlorine-containing polymer.
34. (New) A stabilizer system for stabilizing halogen-containing polymers against thermal degradation, the stabilizer system comprising:
- (a) at least one perfluoroalkanesulphonate salt; and
  - (b) at least one alkanolamines wherein the alkanolamine has the general formula (III)



wherein x is 1, 2, or 3;

y is 1-6;

n is 1-10;

$\text{R}^1$  and  $\text{R}^2$  independently of one another are H,  $\text{C}_1$ - $\text{C}_{22}$  alkyl,  $-\left[(\text{CHR}^3_a)_y - \text{CHR}^3_b - \text{O}\right]_n - \text{H}$ ,  $-\left[(\text{CHR}^3_a)_y - \text{CHR}^3_b - \text{O}\right]_n - \text{CO} - \text{R}^4$ ,  $\text{C}_2$ - $\text{C}_{20}$  alkenyl,  $\text{C}_2$ - $\text{C}_{18}$  acyl,  $\text{C}_4$ - $\text{C}_8$  cycloalkyl, which may have OH substitution in the  $\beta$ -position, phenyl,  $\text{C}_7$ - $\text{C}_{10}$  alkylphenyl or  $\text{C}_7$ - $\text{C}_{10}$  phenylalkyl, or if  $x=1$ ,  $\text{R}^1$  and  $\text{R}^2$  may also form, together with the N atom to which each is bonded, a closed 4-10 membered ring of carbon atoms optionally containing up to 2 heteroatoms, or if  $x=2$ ,  $\text{R}^1$  may be  $\text{C}_2$ - $\text{C}_{18}$  alkylene which may have OH substitution at the two  $\beta$ -carbon atoms and/or may have interruption by one or more O atoms and/or by one or more  $\text{NR}_2$  groups, dihydroxy-substituted tetrahydrodicyclopentadienylene, dihydroxy substituted ethylcyclohexanylene, dihydroxy-substituted 4,4'-(bisphenol-A-dipropyl ether)ylene, isophoronylene, dimethylcyclohexanylene, dicyclohexylmethanylene or 3,3'-dimethyldicyclohexylmethanylene, or if  $x=3$ ,  $\text{R}^1$  may be a trihydroxy-substituted (tri-N-propyl isocyanurate)triyl;  $\text{R}^3_a$  and  $\text{R}^3_b$  independently of one another are  $\text{C}_1$ - $\text{C}_{22}$  alkyl,  $\text{C}_2$ - $\text{C}_6$  alkenyl, phenyl,  $\text{C}_6$ - $\text{C}_{10}$  alkylphenyl, H or  $\text{CH}_2 - \text{X} - \text{R}^5$ , wherein X is O, S, -O-CO- or -CO-O-;

$\text{R}^4$  is  $\text{C}_1$ - $\text{C}_{18}$  alkyl, alkenyl or phenyl; and

R<sup>5</sup> is H, C<sub>1</sub>-C<sub>22</sub> alkyl, C<sub>2</sub>-C<sub>22</sub> alkenyl, phenyl or C<sub>6</sub>-C<sub>10</sub> alkylphenyl.

35. (New) The stabilizer system of claim 34, further comprising a phosphorous-containing stabilizer.

36. (New) The stabilizer system of claim 32, wherein the perfluoroalkanesulfonate salt is a salt of a metal selected from the group consisting of Li, Na, K, Mg, Ca, Sr, Ba, Sn, Zn, Al, La and Ce.

37. (New) The stabilizer system of claim 35, wherein the perfluoroalkanesulfonate salt is sodium triflate or potassium triflate.

38. (New) The stabilizer system of claim 34, wherein n is 1 and y is 2 or 3.

39. (New) The stabilizer system of claim 34, wherein the alkanolamines are reaction products of NH<sub>3</sub>, or reaction products of primary or secondary amines, with ethane oxide, propene oxide, butane oxide or (thiol)glycidyl ethers or are reaction products of (thio)glycidyl ethers with alkanolamines.

40. (New) The stabilizer system of claim 34, wherein the alkanolamine is present in an amount of from about 0.01 to about 10 parts by weight, based on the weight of the halogen-containing polymer and the perfluoroalkanesulfonate salt is present in an amount of from about 0.001 to about 5 parts by weight, based on the weight of the halogen-containing polymer.

41. (New) The stabilizer system of claim 34, further comprising metal soaps, polyols, disaccharide alcohols, glycidyl compounds, hydrotalcites, alkali metal/alkaline earth metal aluminosilicates, alkali metal/alkaline earth metal hydroxides, alkaline earth metal oxides, alkaline earth metal (hydrogen) carbonates, alkali metal (alkaline earth metal) hydroxycarboxylates or carboxylates, phosphates, plasticizers, antioxidants, fillers, pigments, light stabilizers, lubricants, epoxidized fatty esters and mixtures thereof.

42. (New) A halogen-containing polymer comprising the stabilizer system of claim 34.

43. (New) A process for stabilizing a chlorine-containing polymer against thermal degradation, the process comprising adding the stabilizer system according to claim 34 to the chlorine-containing polymer.